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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,026	02/19/2004	Ronald R. Walker	NEXT 8610U1	5610

1688 7590 07/06/2005

POLSTER, LIEDER, WOODRUFF & LUCCHESI
12412 POWERS COURT DRIVE SUITE 200
ST. LOUIS, MO 63131-3615

EXAMINER

JOHNSON, STEPHEN

ART UNIT PAPER NUMBER

3641

DATE MAILED: 07/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,026

Applicant(s)

WALKER ET AL.

Examiner

Stephen M. Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. This application contains claims directed to the following patentably distinct species of the claimed invention: Species A is illustrated in figs. 1-2. Species B is illustrated in figs. 3-4. Species C is the illustration of figs. 1-2 after substitution of aerial shell 300 for pyrotechnic composition 132 (see paragraph [0046]). Species D is the illustration of figs. 3-4 after substitution of aerial shell 300 for pyrotechnic composition 228 (see paragraph [0046]).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the pyrotechnic prime composition as located in the claim 2 description; at least one ignition source with the enclosed base proximate the pyrotechnic compositions or delay fuse (claims 4, 6, 9, and 13); the second ignition source within the enclosed base proximate the smokeless pyrotechnic propellant (claims 5 and 12); must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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4. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

It is not understood as to how the unillustrated “pyrotechnic prime composition” or “one or more ignition sources” disposed within the combustion chamber proximate the pyrotechnic composition performs the function of propagating flame of the surfaces of the pyrotechnic composition. Further, it is not understood as to how the unillustrated prime composition or one or more ignition sources are activated or from what materials these prime compositions or ignition sources are composed.

With regard to claims 6 and 13, applicant has no single embodiment that contains both a first ignition source for combustion of the pyrotechnic compositions 132 or 228 and a second ignition source for combustion of the at least one aerial shell 300. Consequently, claims 6 and 13 lack an enabling disclosure.

Throughout the claims, the term “a smokeless pyrotechnic propellant” has been used. However, the written description lacks an specifics as to what propellants would qualify as the claimed smokeless pyrotechnic propellants.

5. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

It is not understood as to how the unillustrated “pyrotechnic prime composition” or “one or more ignition sources” disposed within the combustion chamber proximate the pyrotechnic composition performs the function of propagating flame of the surfaces of the pyrotechnic composition. Further, it is not understood as to how the unillustrated prime composition or one or more ignition sources are activated or from what materials these prime compositions or ignition sources are composed.

With regard to claims 6 and 13, applicant has no single embodiment that contains both a first ignition source for combustion of the pyrotechnic compositions 132 or 228 and a second ignition source for combustion of the at least one aerial shell 300. Consequently, claims 6 and 13 lack an enabling disclosure.

Throughout the claims, the term “a smokeless pyrotechnic propellant” has been used. However, the written description lacks an specifics as to what propellants would qualify as the claimed smokeless pyrotechnic propellants.

6. Claims 1-8 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 3-7, the phrases “said pyrotechnic composition”; “said launch tube”; and “said smokeless pyrotechnic propellant” lack antecedents. In claim 2, lines 3-4, the phrases “said launch tube” and “said pyrotechnic composition” lack antecedents. In claim 3, lines 3-4, how is the term “a smokeless pyrotechnic propellant” intended to relate to the previously claimed (smokeless pyrotechnic propellant). In claim 4, last line, how is the phrase “one or more pyrotechnic compositions” intended to relate to the previously claimed (one or more pyrotechnic

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compositions)? In claim 13, the phrase "said one or more pyrotechnic compositions" lacks complete agreement with its antecedent (at least one pyrotechnic composition).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker in view of Beattie.

Decker discloses a pyrotechnic display device and associated method for discharging and method for construction comprising:

- a) an enclosed base defining an open end; 10, 11
- b) a launch tube; 20
- c) an open discharge end; 20 (see fig. 5)
- d) a pyrotechnic propellant; 15, col. 2, lines 30-35
- e) a sealing member or non-combustable separation member; 43
- f) at least one pyrotechnic composition; col. 3, lines 46-51
- g) one or more ignition sources proximate the pyro composition; 46 or 52
- h) an axial bore; contains 45
- i) a combustion delay component to obstruct the axial bore; 45
- j) a closure member between the open end and the pyro composition; and see fig. 1 (above 31)
- k) a second ignition source. 14, 18

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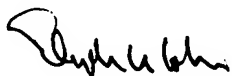
Decker applies as recited above. However, undisclosed is a pyrotechnic propellant that is a smokeless pyrotechnic propellant. Beattie teaches a pyrotechnic propellant that is a smokeless pyrotechnic propellant, col. 6, line 66. Applicant is substituting one type of pyrotechnic propellant for another in an analogous art setting as explicitly encouraged by the secondary reference (see col. 6, lines 64-68 of Beattie). It would have been obvious to a person of ordinary skill in this art at the time of the invention to apply the teachings of Beattie to the Decker pyrotechnic display device and have a pyrotechnic display device that uses a particular type of smokeless propellant.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Youd et. al. disclose another state of the art pyrotechnic device.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Johnson whose telephone number is 571-272-6877. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 571-272-6873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.



STEPHEN M. JOHNSON
PRIMARY EXAMINER

Stephen M. Johnson
Primary Examiner
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